TN Department of Health

RECOMMENDATIONS TO THE GOVERNOR

FOR IMPROVING AND MAKING MORE EFFICIENT THE DEPARTMENT'S SERVICE OF RURAL TENNESSEANS

Response to Governor Bill Lee's Executive Order No. 1

June 2019

Lisa Piercey, MD, MBA, FAAP, Commissioner of the Department of Health, approved this document June 28, 2019.

TDH's Statement of Rural Impact and Recommendations to the Governor in response to Executive Order No. 1 are in alignment with the department's current strategic planning process, as well as Tennessee's State Health Plan (TCA § 68-11-1625).

Foreword: A Message from the Commissioner

Dear Governor Lee and Fellow Tennesseans,

Dr. Lisa Piercey, Commissioner
Tennessee Department of Health

We appreciate the opportunity for the Tennessee Department of Health to respond to both parts of Executive Order No. 1. In our Statement of Rural Impact, submitted in May 2019, we provided an overview of the landscape of health across rural Tennessee, as well as the department's mission and programs in place to address the needs of rural Tennesseans. These included our work to prevent tobacco use and substance misuse, engagement of local leadership across the state, and the provision of public health services, through our local health departments in 89 rural counties.

We respectfully submit this second report in response to the Executive Order, which will provide recommendations for improving and making more efficient the department's service of rural Tennesseans. As stated in the first report, our state is thriving in many respects, but poor health outcomes are a consistent challenge, especially in the rural areas that bear a disproportionate burden of disease and early death. In this second report, we will recommend a number of opportunities to prevent chronic disease and illness and to improve access to health care safety net services for rural Tennesseans. TDH appreciates the opportunity to provide this report, which aligns with both our strategic planning process and the State Health Plan.

Our approach is both evidence-based and informed by the communities we serve. TDH recognizes that while many of the recommendations contained in this report are feasible with our current landscape and funding, there are also additional investments in prevention and access that may be considered by the Governor, General Assembly, and our many partners within and external to state and local government. TDH is committed to maximizing internal efficiencies and to innovate alongside many partners to address new and mounting challenges to the health of rural communities.

Thank you once again, Governor Lee, for your leadership and commitment to rural Tennessee. We look forward to the ongoing work to improve the health of our state.

Lisa Piercey, MD, MBA, FAAP
Tennessee Commissioner of Health

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Supporting Local Leadership to Improve Health

Beginning with a new County Health Assessment (CHA) initiative, TDH has built a platform to listen to rural residents and to give communities a space to forge cross-sector partnerships that support community-driven solutions to improve health. Expanding and improving this platform is a key component of TDH's Strategic Plan. The drivers of Tennessee's health challenges are multi-faceted and reach far beyond clinic walls. Health care has a crucial role to play in improving health, but health care alone cannot influence all of the places and spaces that shape the health of individuals and communities in Tennessee. Engagement across sectors is critical to building the kinds of collaborative solutions required to prevent disease from occurring in the first place. TDH believes our partners know their communities best and are in the most effective position to identify the strategies that will work to improve health where they live, learn, work, worship, and play. Our recommendation is to bolster these community-led efforts so each county is equipped to address their respective health needs.

TDH recognizes county health councils as critical partners in its community engagement strategy. Each council is unique, made up of volunteers from multiple sectors in all 95 counties in Tennessee. TDH established county health councils in the mid 1990's, and they have since undertaken important work with varying degrees of support from TDH. Now, TDH has begun an ongoing effort to systematically engage and accelerate the work of county health councils by giving them the tools to assess the health of their communities, utilize data to drive action, and cultivate local leadership on community-informed intervention strategies.

TDH is pursuing two approaches that will continue to develop our ability to support local leadership through county health councils: (1) expanding and refining the CHA process, and (2) providing an internal framework to enhance the capacity and effectiveness of county health councils. The CHA process is rolling out to all 89 rural TDH counties through a three-year cycle, after a pilot cohort of 16 counties completes assessments in summer 2019. A key component of the CHA process is the selection of shared priority issues. Because every county has unique challenges, assets, and resources, TDH has built tools to assist councils in selecting best-fit intervention strategies that are then carried out by the councils. TDH continues to refine the tools and improve the quality of local data to support implementation of these strategies.

TDH will develop an assessment of county health councils to determine how we can optimally support the growth, impact, and maintenance of county health councils. The findings from this assessment will help TDH learn what factors make health councils most effective and determine the ways we can best support them in successfully addressing their priorities. The assessment will also help inform TDH resources to advance health council work, including a web-based resource, technical assistance, and ongoing learning support. Additional investment in county health councils will augment councils' abilities to build networks of influence in each county which can leverage additional partnerships to improve the health and livability of communities. These councils include representation from multiple sectors that make decisions influencing health in their communities, and strengthened engagement over time will allow TDH to align local efforts and state government resources to best serve rural communities in Tennessee.

Preventing Chronic Disease & Illness in Rural Communities

In order to fulfill our mission to protect, promote, and improve the health and prosperity of people in Tennessee, our first guiding principle is prevention. The value of prevention will always exceed that of treatment, and expanding prevention as a strategic framework is critical to both averting illness and lowering costs. TDH's prevention focus is on the drivers of Tennessee's leading causes of death and disability: tobacco use, youth obesity, substance misuse, and adverse childhood experiences.

Investing in Tennesseans by Reducing the Burden of Tobacco

Tobacco is the leading driver of preventable morbidity and mortality in Tennessee. Tobacco-related diseases kill nearly 31 Tennesseans daily and cost the state nearly $3 billion each year. Representing a new threat, more than 40 percent of Tennessee youth have used an electronic cigarette. Rural Tennesseans have higher rates of tobacco use, and more than a quarter of adult residents in these areas are current smokers.

Tennessee benefited greatly from $20 million in state funding for tobacco prevention initiatives from FY15 through FY18, with pregnancy smoking declining by nearly 20 percent and youth initiation of smoking falling by nearly 50 percent. While this funding was eliminated in the FY19 budget, the Administration and the General Assembly recognized the importance of these prevention initiatives, particularly to the rural parts of the state, and authorized $2 million in non-recurring funding for the FY20 budget. TDH will also continue to seek all federal funding opportunities to reduce the burden of tobacco on its residents and economy.

In keeping with both evidence-based tobacco prevention policy and state and federal funding guidance, TDH will support comprehensive statewide efforts to both prevent youth initiation and to assist adolescents and adults who wish to quit smoking. Additional emphasis will be placed on the following efforts:

- Baby and Me Tobacco Free (BMTF): Smoking during pregnancy is linked to many health risks, including low birth weight, impaired lung function, and higher blood pressure. BMTF is a pregnancy smoking cessation program supported by state funds and administered through local health departments in Tennessee that connects pregnant women who smoke with counseling and diaper voucher incentives for those who quit. TennCare MCOs also financially support BMTF due to the benefits of the program including lower health care costs due to healthier mothers and babies. Since its inception in 2014, BMTF has expanded to all 95 counties, enrolled nearly 9,000 women, and contributed to a 20 percent decline in prenatal smoking rates. TDH will expand the impact of BMTF by developing referral networks, marketing to increase the number of women enrolling in the program, and working with local health departments, TennCare MCOs, and the vendor to increase retention in the program.

- Youth Prevention: TDH will continue to support programs and interventions to prevent youth in Tennessee from using tobacco products and e-cigarettes. These initiatives include establishing youth councils in all 95 counties, engaging youth councils to lead peer-to-peer education events, hosting an annual TNSTRONG youth leadership summit, and deploying statewide media campaigns to raise awareness of the harmful impacts of tobacco and to encourage youth to live a tobacco-free life.

- The Tennessee Tobacco QuitLine (TTQL): The TTQL is a predominantly federally funded program that provides residents in Tennessee with one-on-one counseling and two weeks of nicotine replacement therapy at no charge to Tennessee residents. TTQL has received more than 63,000 calls and provided services to more than 16,000

Tennesseans since 2015. Approximately 30 percent of participants have quit within six months of enrollment. With the contract for the current TTQL contract about to expire, TDH is preparing to procure the most effective and cost-efficient service contractor and will focus efforts on QuitLine performance, working closely with TennCare, private providers, local health departments, and hospital systems to integrate this service into patient care. TDH will also continue to distribute promotional materials to providers and the public, highlighting the tools and resources available to assist smokers in quitting.

Despite directed programmatic efforts of the department to prevent and reduce tobacco use, policies with the greatest evidence of effectiveness are largely in the control of the people and elected officials of Tennessee. Increasing the excise tax on cigarettes and e-cigarettes, raising the purchase age for these products, eliminating exemptions in Tennessee's smoke free air law, allowing more local control of tobacco regulation by repealing pre-emption, and investing in the statewide TNSTRONG youth initiative, are well researched strategies that would have profound impacts on the state's health and financial wellbeing in both the short and long term.

Investing in Clinics & Communities to Decrease Youth Obesity

The factors driving youth obesity are complex, interrelated, and require multi-faceted planning. Promoting healthy eating and physical activity are key strategies employed by TDH in addressing youth obesity, with efforts that are both clinic-based and community-based. These approaches include education, programming, policy changes, and access to healthy foods and environments.

Local health departments in each of Tennessee's 89 rural counties provide TDH the opportunity to deliver evidence-based programs to families in rural communities across the state. A strong body of research has demonstrated the effectiveness of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), a federally-funded program that promotes healthy eating and nutrition education for infants and children up to age five, and low-income women who are pregnant, postpartum, or breastfeeding. Nutrition during pregnancy and early childhood is critical for healthy child growth and development. Each month, approximately 120,000 Tennesseans at nutritional risk receive WIC benefits provided through TDH in county health departments, stand-alone clinics, and hospital sites throughout the state. Given the availability of this evidence-based obesity prevention service in all counties, TDH has included optimization of WIC in its strategic plan. This will include focusing efforts on increasing participation, minimizing barriers to clinical services, and improving the shopping experience with local store partners.

A growing body of research has shown that the environments where we live, work, and play have an important role in shaping our choices and behavior. Providing access to opportunities for physical activity is a necessary part of health for both youth and adults. TDH has invested in the creation of physical activity opportunities in rural communities through its Access to Health and Project Diabetes built environment grant programs. Together, these grants have funded 218 projects across Tennessee that increase access to safe and health-promoting public spaces, including walking tracks, playgrounds, sports facilities, trails, and greenspaces. TDH will continue to invest in health-promoting built environment projects, which not only provide opportunities to be active, but can also improve mental health, social connectedness, and economic development in rural communities.

TDH and its partners will continue to sponsor community programs, including breastfeeding programs such as the 24-7 Breastfeeding Hotline and the business partnership of Breastfeeding Welcomed Here, as well as the Gold Sneaker Initiative which encourages daycare centers to promote healthy food and physical activity, while decreasing tobacco exposure. The Tennessee Department of Health and Tennessee Department of Education will continue their collaboration to promote physical activity and healthy eating through school-based programs that reduce consumption of sugar-sweetened beverages and promote nutritious foods. These initiatives will increase the percentage of Tennessee schools that do not sell unhealthy foods and beverages. TDH and TDE will also support exercise and movement through legislative and policy changes, as well as the Comprehensive School Physical Activity Program (CSPAP). Professional development for CSPAP is expected to expand from 17 to 25 local school districts in the 2019-2020 school year.

Finally, multidisciplinary efforts, such as the 17-member Tennessee Livability Collaborative, exhibit the ways which TDH will work collaboratively to address upstream drivers of health across multiple sectors. Facilitated by TDH's Office of Primary Prevention, the Tennessee Livability Collaborative will continue to promote a high quality of life for all Tennesseans that includes opportunities for education, employment, health, transportation, healthy foods, housing, recreation, and culture in rural Tennessee communities. Collaborative members will continue to develop and support initiatives that benefit rural Tennesseans through capacity-building efforts such as the Tennessee Ambassador League Institute (TALI). By outlining and coordinating programs, policies, and funding aimed at stimulating economically strong places to live and work, the Collaborative will foster cross-agency collaboration and leverage resources wisely.

Preventing & Treating Substance Abuse & Misuse

The epidemic of substance abuse and misuse in Tennessee has complex roots, and has disproportionally impacted many rural areas across in our state. At the same time, the potency and availability of illicit opioid medications increased while the price dropped. As these trends became evident across rural communities, the response of the medical community in decreasing overprescribing practices has become critically important.

A multi-pronged approach was implemented with key stakeholders in state government, professional associations, community anti-drug coalitions, and federal partners. The approach was based on education, increased regulation (especially of "pill mills" and over-prescribers), increasing use of the Controlled Substances Monitoring Database (CSMD) to avoid overprescribing, limiting dose and duration of new opioid prescriptions, increasing access to treatment, and strengthening law enforcement response.

Despite all of the progress, much remains to be done to end this unprecedented epidemic of overdose deaths in Tennessee. While beginning largely with abuse and misuse of prescribed opioids and benzodiazepines, the epidemic now is largely due to illicit opioids and stimulants such as methamphetamine. Overdose deaths continue to increase overall, but significant shifts are evident: deaths involving prescribed opioids have begun to decrease, but those involving illicit fentanyl, heroin, and stimulants have seen a dramatic increase. Also, for people dying of overdose, the age of death is decreasing and involvement of multiple illicit drugs has become the usual pattern.

Going forward, TDH will focus efforts to (1) assist high impact areas for non-fatal overdoses in selecting and implementing effective interventions; (2) improve surveillance of overdoses and overdose deaths; and (3) enhance provider engagement to prevent addiction and optimize treatment.

- A relatively small number of counties in the state account for the vast majority of non-fatal overdoses, which are clustered in areas usually involving a metropolitan county with its surrounding suburban and rural counties. By focusing on these high impact areas we will assist local public health leaders in planning and implementing effective practices, leading to comprehensive solutions of problems that transcend county lines.

- The sooner we can understand changes in the epidemic of substance abuse, the better we can assist communities in refining and executing their responses. Since the dynamics of the drug overdose epidemic are somewhat different in each region of the state, we will develop reporting systems that are more robust, specifically by improving the capability to integrate information from sources other than the CSMD and in adding information about overdoses involving stimulants.

- TDH will improve provider engagement to prevent addiction and optimize treatment, primarily through enhanced education (such as smartphone-based continuing

education and in-person academic detailing efforts) and effective connection of patients to treatment programs.

Much attention has been paid to limiting the destruction wrought by substance misuse, but the ultimate focus should be on preventing substance misuse from ever happening. Most experimentation with substances begins in adolescence and early adulthood. The middle school and high school years are a critical time to address substance abuse and misuse, which means we will need to recognize and engage with students facing increased risk, particularly those with multiple Adverse Childhood Experiences (ACEs).

Preventing & Mitigating Adverse Childhood Experiences

Exposure to violence, crime, and abuse in any form has the potential to alter the developing brain architecture of young children and increases the risk of poor health outcomes throughout that child's life. Some of the worst health and social problems in our nation can arise as a consequence of adverse childhood experiences (ACEs). These experiences raise the individual's risk for severe emotional distress, suicide, chronic disease, substance abuse, and a host of other life difficulties. Over 56 percent of adults in Tennessee have experienced at least one ACE, and nearly a quarter have experienced three or more. As a consequence, both national and Tennessee-specific data demonstrate a linear relationship between the number of ACEs experienced and the risk of negative health behaviors, such as smoking and binge drinking, a consequence of toxic stress on the developing brain. There are also connections between ACEs and low graduation rates, poor academic achievement, and lost time from work. In 2017, ACEs among Tennessee adults led to an estimated $5.2 billion in direct medical costs and lost productivity from employees missing work.

Training staff and partners on the science of ACEs is necessary to transform organizations and community partners into service delivery systems that are trauma-informed with leaders who plan with prevention in mind. As part of its strategic plan, the Tennessee Department of Health will train its leadership, staff, and funded partners. TDH will also offer this curriculum to local health councils and other community partners.

In addition to training, TDH will implement evidence-based strategies for ACEs prevention and mitigation. Evidence-Based Home Visiting (EBHV) is one of the leading interventions in preventing or mitigating ACEs. EBHV programming affects outcomes for both child and caregiver through a two-generation approach, and promotes positive parent-child relationships in a manner that is culturally competent, strengths-based, and family-centered. When families volunteer to receive home-based support with ACEs-trained professionals, their children are born healthier and are less likely to experience abuse or neglect. In Tennessee, EBHV programs are currently available in 52 counties across the state. TDH will use the non-recurring additional legislative appropriation for FY20 to retain and expand EBHV programming in the eastern and northeastern parts of the state, which have been most affected by opioid-exposed births.

TDH also continues to look for opportunities to further invest in services for Tennesseans to support strong families that are equipped to provide nurturing relationships for children, which are known to mitigate the potential impacts of ACEs. These include WIC services, family planning, and positive youth development. This year, TDH will also fully implement its care coordination program, Community Health Access and Navigation in Tennessee (CHANT), which is designed to assist families with both medical and social needs that are often drivers of infant and maternal morbidity and mortality.

Increasing Access to Care in Rural Communities

Approximately 4,000,000 Tennesseans live in rural areas. Access to health care, particularly specialty care, continues to be a challenge for citizens living in rural areas of Tennessee. According to the National Rural Health Association, the patient to primary care ratio in rural areas is 13.1 physicians per 10,000 persons compared to 31.2 physicians per 10,000 persons in urban areas. The distribution of specialists is even more disproportionate in rural areas, and the workforce shortages in rural areas contribute to rural health disparities. Other socioeconomic issues such as transportation and education also contribute to poor access to care.

TDH provides basic public health services in all rural counties of the state. The department also has a role in recruiting and retaining providers, convening key stakeholders in rural health care access, and supporting the primary care and specialty care safety nets in the state. TDH recognizes a number of potential opportunities to improve access to health care, both within its own walls and beyond.

Optimizing Internal Primary Care Efficiency

Ready access to primary care services in rural areas is critical not only to the health of individual Tennesseans, but is also vital for the success of any component of the health care spectrum, including rural hospitals. Unfortunately, every rural county in Tennessee is considered a health professional shortage area (HPSA) in primary care, with several counties having a single primary care physician for 10,000 or more individuals. In addition to the number of providers, access to primary care in rural areas is influenced by facility location, specialty and emergency care coordination, and affordability. Shortages are most acute in rural communities with higher poverty and unemployment rates and lower per capita income, where populations tend to be disproportionately older and sicker, and where hospitals struggle to remain financially viable.

There are multiple ways that TDH is addressing barriers to accessing health care services in rural communities, including optimizing the efficiency of primary care services provided by our department. TDH is uniquely poised as one of the few public health agencies nationwide to provide direct primary care services to uninsured residents across 56 sites in 51 rural counties, including operation of 16 federally qualified health centers (FQHCs). In order to maximize access to TDH primary care services across rural Tennessee, our department's four-year strategic plan includes a significant focus on increasing efficiency and throughput, enhancing productivity and financial performance, and measuring and improving patient satisfaction.

Improving External Primary Care Access

Safety net-funded FQHC, community, and faith-based partners allow TDH to support an even broader reach in primary care for rural Tennesseans. Established in 2006, the Health Care Safety Net Program for Uninsured Adults is administered by the State Office of Rural Health, with annual appropriations ranging from $9.4M (FY19) to $12M (FY14 and prior) to support approximately 100 organizations to deliver primary medical, dental, and care coordination services to uninsured adults ages 19-64. In FY18, funding methodology and contracting vehicles were adjusted to maximize the use of funds to support patient services and to improve accountability. The appropriation for FY20 restored recurring available funding to $10.4M, and an additional non-recurring amount of $1.5M will be used to supplement these organizations in the same manner.

Improvements to the safety net funding formula over the last few years have allowed for better stewardship in how these critical funds are spent. Going forward, continued progress in how TDH distributes these dollars will support capacity-building among current providers, especially within at-risk and distressed counties. Additional monies allocated to the safety net fund could be utilized to expand both primary care and specialty access by increasing allocations to currently funded entities and/or by opening funding eligibility to additional entities. Likewise, working towards aligning primary prevention efforts within these health care sites will help TDH further its mission to protect, promote, and improve the health and prosperity of Tennesseans, especially those in rural areas who are more likely to experience higher rates of chronic disease and premature death.

Improving Health Access to Specialty Services

Primary care is necessary but inadequate to meet the basic needs of Tennesseans, particularly those lacking specialty support for diagnostic services, consults, and referrals. Lack of timely specialty care can result in adverse medical outcomes and higher costs from avoidable utilization of emergency departments and hospitals. Tennessee's safety net providers are often required to rely on personal relationships, favors, and unaffordable out-of-pocket costs for patients, rather than an established specialist network system to secure referrals for patients. These informal referral networks are susceptible to uncertainty in terms of specialist availability, inconsistent communication, and unclear protocols. The four regional safety-net funded Project Access programs provide essential care coordination services and the coordination of specialty or diagnostic donated care between specialists, primary care providers, and safety net providers, but currently have the capacity to serve only seven of our 95 counties.

TDH recommends exploration of means to extend a network of specialist referral and care coordination to rural areas for the uninsured and underinsured residents of the state. This could include expansion of the Project Access model or the consideration of other models such as those used by neighboring states. This could also include capacity assessment of current safety net providers and facilities for broader utilization of telehealth services in rural areas.

Enhancing Provider Recruitment & Retention

Salaries and benefits for clinicians are often lower in safety net clinics, including primary care clinics operated by local health departments. TDH is exploring ways to attract and retain clinicians, including flexible scheduling and use of telehealth infrastructure. Incentives such as loan repayment programs are designed to help clinicians reduce educational debt in return for a commitment to serve in shortage areas, but are limited in both number and funding. The Tennessee State Loan Repayment Program can typically fund half the number of eligible applications each year. Additionally, between 17 and 20 Conrad J-1 Visa Waivers are made available each year for foreign-born physicians to practice in Tennessee, and an opportunity exists to leverage additional program capacity to increase the number of visa waivers to the 30 allocated for Tennessee.

TDH is committed to addressing provider recruitment and retention for TDH and non-TDH safety net clinics by assessing current delivery care models and structure within TDH clinics, promoting the J-1 Visa, and surveying clinicians to identify barriers and needed incentives for recruitment and retention to the highest need areas. The State Loan Repayment Program has been successful in placing providers, and most have stayed beyond their initial two-year commitment. Additional funding may help expand the number of loan repayment awards or to increase award amounts. Meanwhile, the state should prioritize applicants committed to serving in the highest need communities. Recent efforts to increase capacity in Tennessee's primary care residency training are encouraging, and TDH is exploring opportunities to enhance trainees' exposure to public health and rural settings.

Fostering Innovation

With a changing health care landscape, an aging population, and rising health care costs, TDH and our partners are compelled to challenge traditional ways of thinking through both structural and functional innovation.

- Telehealth: TDH recognizes a potential to expand its current services and potentially to support greater health care in general, through the use of telehealth capabilities. In particular, TDH will explore how technology may be utilized to improve access to care in rural areas, by expanding the reach of the current workforce and providing professional education and mentoring, as well as increasing access to specialty consultations. Given the particular challenges for mental and dental health access in rural areas, emphasis on expansion of these services via telehealth is equally important.

- Community Paramedicine: In rural areas, many patients have chronic illnesses and need medical support services to recover at home. Although these patients are not sick enough to need hospital care, they require intensive support at home to prevent their condition(s) from deteriorating. Community paramedicine allows paramedics and emergency medical technicians (EMTs) to function in expanded roles to serve patients with chronic medical needs and limited access to primary care. Other states have successfully funded similar programs through a variety of sources, including commercial health insurers, Medicaid, hospitals, and accountable care organizations.

- Payment Model Innovation: While innovation often implies technological advances, it is also crucial to advance innovative models of care delivery and reimbursement to adequately address the changing needs of rural Tennesseans. With Tennessee experiencing three hospital closures in the first half of 2019, and a dozen since 2010, TDH and our partners are exploring new and unique models of service delivery in areas that need it most – especially those communities that have suffered a reduction or loss of health care access due to a hospital closure. TDH plans to engage payers, providers, and other local stakeholders in brainstorming ways to sustainably address specific needs in rural counties, such as urgent/emergent care, specialist access, and community paramedicine.

Summary & Acknowledgements

TDH appreciates the opportunity to give an overview of recommendations to improve rural health in Tennessee. We look forward to the ongoing collaboration around these and other initiatives to benefit the health of individuals and communities across our great state.

Thank you to the team of TDH professionals including our Senior Leadership Team, Executive Leadership Team, and Executive Order No. 1 Task Force, for their oversight and strategic guidance of this process. We would like to specifically recognize the following TDH staff:

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